GRANDE RONDE MODEL WATERSHED PROGRAM ADMINISTRATION AND HABITAT PROJECTS

Annual Progress Report

Project Period:

Program Administration: January 1, 1997 – December 31, 1997
Habitat Projects: January 1, 1997 – March 31, 1998

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Program Administration:

Project No. 92-026-01
Contract No. DE-AI79-92BP66658

Habitat Projects:

Master Project No. 94-027-00
with Multiple Implementation Project and Contract Numbers

GRANDE RONDE MODEL WATERSHED PROGRAM

PROGRAM ADMINISTRATION
Report of Contract Compliance
Project Number 92-026-01
Contract No. DE-AI79-92BP66658
Modification #10 - Work Period January 1 - December 31, 1997

This agreement provided funding for operation and administration of the Grande Ronde Model Watershed Program including staffing of an Executive Director, Program Planner, and clerical personnel. The contract covers maintaining program services, project planning, subwatershed plans (CRMP's), public involvement and education, interagency coordination/clearing house, monitoring, and technical support activities that have taken place in the Grande Ronde basin. Cost-share has been received from the Bureau of Reclamation and the Governor's Watershed Enhancement Board.

Activity 1: Board/Program Administration

This is an on-going activity; it has been successfully completed for the time period referenced. The Board of Directors has held monthly meetings, Technical Committee meetings have been on-going to facilitate project implementation, and coordination of Board activities with other natural resource management agencies (a critical component of the success of the GRMWP) is occurring in a timely fashion.

Activity 2: Project Planning, Subwatershed Plans (CRMP's)

This activity will be on going, but work identified has been completed for the contract period. Project development and implementation is occurring on an individual landowner basis. There are several habitat restoration projects that have been implemented in the Grande Ronde basin (approximately 180). Additional projects are scheduled for implementation in the FY98 field season. Projects are a cooperative effort with the many partners in the basin. The bulk of the projects address fish passage/irrigation diversions, riparian and rangeland livestock management/off-stream water development, sediment and soil erosion, water quality/quantity, and habitat.

A project focus document has been prepared to aid in targeting projects to priority subwatersheds in the solicitation process (documents attached). Each project proposal follows an extensive review process before funds are allocated. This process begins with GRMWP staff, followed by the Technical Committee, and then the Board of Directors. Next steps include NEPA compliance, Biological Assessments, permits, contracts, etc. with each project before implementation.

While projects are being implemented basin-wide, GRMWP staff have focused efforts on

Catherine Creek in the Grande Ronde subbasin and in the Wallowa subbasin partners have focused on the Lostine River and Bear Creek. Assimilated information has been presented to landowners resulting in several site-specific projects. Work with landowners will be ongoing.

Future planning efforts include updating existing GRMWP documents to include steelhead, which was recently listed under the Endangered Species Act for the Grande Ronde basin. The staff and Technical Committee have already met with local state, federal and tribal fisheries biologists to determine priority areas for steelhead & identify opportunities for restoration actions.

In coordination with Department of Environmental Quality, GRMWP appointed a citizen advisory committee to develop a Water Quality Management Plan for the Grande Ronde basin (in response to the TMDL issues in the basin). The plan will be completed by April of 1999. The SB 1010 Committee is the agricultural component of this WQMP; GRMWP staff has been intimately involved with that activity as well.

GRMWP in cooperation with Union Soil & Water Conservation District and Natural Resources Conservation Service, facilitated development of a Coordinated Resource Management Plan with landowners, agencies, and tribes in the Catherine Creek subwatershed. Assessment information was gathered and presented to landowners along with the planning document. Several site-specific actions were determined in this process and many projects have been developed and funded in this area. Work with landowners will be ongoing.

The Wallowa Soil & Water Conservation District and Natural Resources Conservation Service led the CRMP effort for the Little Sheep Creek landowner group. The plan was completed and several projects are being implemented in the Little Sheep Creek drainage as a result of the document.

Activity 3: Public Information/Involvement and Educational Activities

This activity is complete for the contract period and will be an on-going effort. Several presentations have taken place in this contract period; articles and program updates were provided for publication in partner newsletters, local media, and newspaper inserts. An informational booklet on FY 97 projects was prepared and has been distributed. A list of activities is attached.

Activity 4: Interagency Coordination/Clearinghouse Operation

The activity is on going; the database of watershed restoration projects (1985 - to-date), including those conducted by agencies, tribes, public groups and private landowners has been updated and project maps are distributed annually (providing documentation regarding each project). This information serves as a clearinghouse in documenting activities and provides a means to accurately and quickly answer questions about watershed restoration in the Grande Ronde basin. This information has been provided to all of the GRMWP partners in the basin and many outside the basin. Requests for information from the database are occurring more frequently than anticipated.

Activity 5: Monitoring - Coordination

This effort is on going. In partnership with the Union & Wallowa SWCD's a coordinated effectiveness monitoring strategy is being implemented. This provides for monitoring of cumulative effects on focus/priority subwatersheds. An annual report will continue to be published including summaries, and analysis of data collected from all entities in the basin.
Focus watersheds include: Catherine Creek, Indian Creek, Grande River (mainstem), Lostine River, Bear Creek, and the Wallowa River.

Project Tracking process - This activity is ongoing. A database has been developed for gathering project information and will be coordinated with GIS capability. This is being utilized to track final project reports and annual monitoring/reporting requirements.

Activity 6: Technical Support

This activity is on going. It includes technical support provided by the County sub-basin groups as well as private contractors who provide on site technical assistance, and project management.

Due to staffing shortfalls at the local NRCS offices, a private contractor was utilized to complete project designs for several restoration projects. This is coordinated with NRCS so that the final designs are approved through the state NRCS office before implementation. The contractor is also providing for on-site project management of several complex projects.

Public Involvement Activities
June '97 - December ' 97

Tours:

*Whole Log Tree project tour - July 97
*Governor's Watershed Enhancement Board tour - July 97
*Bureau of Reclamation tour of Bear Creek, Catherine Creek and Lostine - July 97
*BMNRI tour - July 97
*Secretary Bruce Babbitt tour - July 97
*Environmental Protection Agency tour of the Upper Grande Ronde - August 97
*Field Day with Union Experiment Station - August 97
*Environmental Protection Agency Tour of the Upper Grande Ronde - August 97
*Union Experiment Station Livestock/Stream Health Interactions Field Day - August 97

Presentations:

*Presentation to Teacher's Summer Ag. Institute - August 97
*Program presentation to the BMNRI Board of Directors' - August 97
*Salmon Walk - September 97

*Presentation at the Riparian & Watershed Conference at Eastern Oregon University - September 97
*La Grande Christian School's outdoor school - October '97
*GWEB Workshop in Sunriver - October '97
*Program presentation to the Wheat League in La Grande - November '97
*Program presentation to the Cattlemen's Association - November '97
*Program presentation Association of Oregon Counties/John Howard - November '97
*Program presentation to the Western Forestry and Conservation Association Conference in Portland - December '97

News Articles:

*Article for the NRN newsletter - June 97
*****GRMWP Spring/Summer newsletter - June 97
*Article on TMDL's for "The Prompter/Rancher Review" - September 97
*Update on program in the NRN Newsletter - December '97

Other:

*GRMWP Board of Directors' monthly meetings
*Program display up at U.S. Bank during the third week of the month
*Union County Coordination monthly meetings
*Wallowa County Coordination monthly meetings
*Union County Watershed Management Coalition monthly meetings
*Wallowa County Natural Resources Advisory Committee monthly meetings
*Wallowa County Natural Resources Advisory Committee Standing Committee monthly meetings
*Union/Wallowa SWCD monthly meetings
*BMNRI staff meetings
*Program presentation sheet to John E. Barry - June 97
*Program display at the Elgin Riverfest - June 97
*Public hearing/testimony on Bull Trout listing in Boise - July 97
*Radio broadcast on the Public System Announcements (PSA) for the Oregon Progress Board - July 97
*****Program display at the Union County Fair - July 30 through August 2, 97
*Program display at the Wallowa County Fair - August 6 through August 9, 97
*Testimony at Department of Environmental Quality hearing on TMDL issues - August 97
*Radio spot with Mark Hatfield on the Oregon Progress Board regarding Bill Tartar's project - November '97
*Participated in the salmon presentations from the Union High School science class - November '97
*Overview of program with Louise Solliday, Governor's Watershed Advisor - December '97

*Program review with Sissel Waage, Sustainable Northwest - December ‘97

Landowner Meetings:

*Alicel Dike Realignment Landowner meetings - August 11 & 18, 97
*Alicel landowners meeting - October ‘97

GRANDE RONDE MODEL WATERSHED PROGRAM

Habitat Projects
Master Project Number 94-027-00
Fiscal Year 1997 Funding

This project continued the comprehensive watershed restoration program for the Grande Ronde Basin. The Grande Ronde Basin was selected in 1992 by the Northwest Power Planning Council as the model watershed for Oregon. The mission of the Grande Ronde Model Watershed Program (GRMWP) is to "develop and oversee the implementation, maintenance, and monitoring of coordinated resource management that will enhance the natural resources of the Grande Ronde River Basin." This project implemented 40 individual habitat restoration projects under the GRMWP. These 40 projects targeted specific salmonid habitat problems on critical stream reaches in the basin. Habitat restoration and protection are critical links to restoring anadromous fish populations in the Columbia River Basin.

Projects addressed habitat parameters and management activities identified in the 1994 Columbia Basin Fish and Wildlife Program. Objectives of the projects were to improve fish passage at in-stream blockages; improve in-stream habitat diversity; enhance riparian conditions; improve streambank stability; protect spawning adult salmon; improve upland watershed conditions; increase flows to improve stream temperatures; and to improve overall water quality.

Project development followed a structured process, which focused limited resources to critical streams, and locations where habitat benefits could be optimized. Projects were reviewed and prioritized, and implementation and effectiveness monitoring was conducted on each project. A basin-wide monitoring strategy also has been implemented in cooperation with the Union and Wallowa Soil and Water Conservation Districts.

The GRMWP has provided leadership and coordination of both public and private resources across the subbasin. The successful partnerships developed have lead to efficient and effective watershed restoration. The dollars utilized by the GRMWP have been leveraged to produce a "six-fold" increase in funding resources dedicated to habitat restoration for both anadromous and resident salmonids in the subbasin.

Contract #	Project #	Project Name
97AI35970	9704300	Sheep Ranch Riparian Project
97AI35975	9704500	Tybow Canyon Leafy Spurge Project
97AI35976	9704600	Off-Site Water Developments - La Grande Ranger District
97AI35979	9707000	Lower Five Points Off-Site Water Development
97AI35982	9707100	Catherine Creek Riparian Pasture & Off-Site Water Development

97AI35983	9707200	Upper Grande Ronde River & Sheep Creek Instream Structure Modification
97AI35986	9707500	Camp Creek Riparian Exclusion Fence & Off-Site Water Development
97AI35987	9707600	1997 Camp One Restoration
97AP34219	9702800	Middle Fork Clark Creek Crossing Improvement
97AP34227	9702700	Phillips Creek Road Stabilization and Obliteration
97AP34995	9703200	Bailey Creek Spawning Recovery
		Bingaman Dike Set Back
		Elk Mountain Stream Habitat Enhancement
		Grande Ronde/Nesley Ditch Irrigation Reorganization
		Mt Harris/Beck Water Development
		Willow Creek Fish Passage
97AP35314	9703300	Upper Grande Ronde River Riparian Fencing
97AP35315	9703600	Union SWCD - Monitoring Equipment
97AP35782	9707400	1997 Whole Tree Project
97AP35788	9707300	Upper Grande Ronde River Riparian Rehabilitation
97AP36073	9707800	Catherine Creek Streambank Stabilization & Spring Chinook Habitat Enhancement
		Catherine Creek/Shelden/Sheehy Irrigation and Waterway Improvements
		Catherine Creek/Wright-Hempe-Hutchinson Fishway/Diversion Upgrade
		Grande Ronde River Gooderham/Rynearson Works of Improvement
97AP36076	9707700	Bear Creek Channel Improvement
		Bob Morse Livestock Water Development and Stream Crossing Improvement
		Eggleson Estate Riparian Improvement Project
97AP36419	9708300	Miles Ditch Diversion
		Poley Allen Ditch
97AP37346	9708900	R-Y Timber Range Management System
97AP62921	9709000	Hindman Road/North Fork Clarks Creek
97AP62923	9709100	Grande Ronde River Hamilton Streambank Stabilization and Enhancement
97AP62925	9709200	Grande Ronde Alicel Irrigation District Dike Realignment and Refurbishment
97AP62927	9709300	Troy Streambank Protection
97AP64049	9709500	Phillips Creek Stream Habitat Enhancement
97AP64055	9709700	Little Dark Canyon Creek Project
97AP64056	9709600	Warm Spring Creek Riparian Improvement Project
97FC63264	9709800	Cottonwood Creek Riparian Enhancement - II
98AP64646	9710101	Water Quality Monitoring for the Grande Ronde Basin - II
98AP64907	9710200	Catherine Creek State Park Interpretive Signing

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT SUMMARY

BPA Contract #	BPA Project #	Project Name	Status
97AI35970	9704300	Sheep Ranch Riparian Project	Active
97AI35975	9704500	Tybow Canyon Leafy Spurge Project	Completed
97AI35976	9704600	Off-Site Water Developments - La Grande Ranger District	Completed
97AI35979	9707000	Lower Five Points Off-Site Water Development	Completed
97AI35982	9707100	Catherine Creek Riparian Pasture & Off-Site Water Development	Active
97AI35983	9707200	Upper Grande Ronde River & Sheep Creek Instream Structure Modifications	Completed
97AI35986	9707500	Camp Creek Riparian Exclusion Fence & Off-Site Water Development	Active
97AI35987	9707600	1997 Camp One Restoration	Completed
97AP34219	9702800	Middle Fork Clark Creek Crossing Improvement	Active
97AP34227	9702700	Phillips Creek Road Stabilization and Obliteration	Active
97AP34995	9703200	Bailey Creek Spawning Recovery	Active
97AP34995	9703200	Bingaman Dike Set Back	Work Completed
97AP34995	9703200	Elk Mountain Stream Habitat Enhancement	Active
97AP34995	9703200	Grande Ronde/Nesley Ditch Irrigation Reorganization	Active
97AP34995	9703200	Mt Harris/Beck Water Development	Active
97AP34995	9703200	Willow Creek Fish Passage	Active
97AP35314	9703300	Upper Grande Ronde River Riparian Fencing	Active
97AP35315	9703600	Union SWCD - Monitoring Equipment	Completed
97AP35782	9707400	1997 Whole Tree Project	Completed
97AP35788	9707300	Upper Grande Ronde River Riparian Rehabilitation	Active
97AP36073	9707800	Catherine Creek Streambank Stabilization & Spring Chinook Habitat Enhancement	Active
97AP36073	9707800	Catherine Creek/Shelden/Sheehy Irrigation and Waterway Improvements	Active

BPA Contract #	BPA Project #	Project Name	Status
97AP36073	9707800	Catherine Creek/Wright-Hempe-Hutchinson Fishway/Diversion Upgrade	Work Completed
97AP36073	9707800	Grande Ronde River Gooderham/Rynearson Works of Improvement	Work Completed
97AP36076	9707700	Bear Creek Channel Improvement	Work Completed
97AP36076	9707700	Bob Morse Livestock Water Development and Stream Crossing Improvement	Active
97AP36076	9707700	Eggleson Estate Riparian Improvement Project	Active
97AP36419	9708300	Ed Jones Streambank Protection	Work Completed
97AP36419	9708300	Miles Ditch Diversion	Work Completed
97AP36419	9708300	Poley Allen Ditch	Work Completed
97AP37346	9708900	R-Y Timber Range Management System	Active
97AP62921	9709000	Hindman Road/North Fork Clark Creek	Active
97AP62923	9709100	Grande Ronde River Hamilton Streambank Stabilization and Enhancement	Active
97AP62925	9709200	Grande Ronde Alicel Irrigation District Dike Realignment and Refurbishment	Active
97AP62927	9709300	Troy Streambank Protection	Canceled
97AP64049	9709500	Phillips Creek Stream Habitat Enhancement	Active
97AP64055	9709700	Little Dark Canyon Creek Project	Active
97AP64056	9709600	Warm Spring Creek Riparian Improvement Project	Active
97FC63264	9709800	Cottonwood Creek Riparian Enhancement - II	Active
98AP64646	9710101	Water Quality Monitoring for the Grande Ronde Basin - II	Active
98AP64907	9710200	Catherine Creek State Park Interpretive Signing	Active

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Sheep Ranch Riparian Project
BPA Project Number: 9704300
BPA Contract Number: 97AI35970
Project Implementor and Address: U.S. Forest Service
La Grande Ranger District, 3502 Hwy 30
La Grande, OR 97850

Project Leader(s): Pete Etchamendy, U.S. Forest Service

Project Description (Short): The project is located in the upper Sheep and upper Fly Creek watersheds. These are spawning reaches for spring chinook salmon and steelhead and require protection from livestock grazing at the onset of spawning activity. This project will install or reconstruct 11 miles of riparian exclosure fence to protect and enhance 10 miles of spring chinook salmon and steelhead spawning habitat.

Location Information:

Site Name (i.e. creek, hatchery): East Sheep Creek, Sheep Creek, Fly Creek & tributaries.
Subsite Name (i.e. specific location, legal description): T5S R34E Sec 16, 21, 28, 33 NW, T6S R35.5E Sec 28 SW, 33, T6S R35E Sec 11 SE, 12, 14, 23, 25, 26 NE, 36 NENE
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Tower Mountain, Fly Valley

Site Type Description (See Attachment 1): F

Work Type Description (See Attachment 2): B

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 12/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 66,720.00 BPA Cost Share - $29,469.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Construct/Reconstruct 11 miles of riparian exclosure fence to protect 10 miles of stream and 120 acres of riparian habitat.

Are salmon production/supplementation activities planned or currently being implemented in this watershed?

Yes, a captive brood stock program has been conducted in the upper Grande Ronde River and an endemic spring chinook salmon supplementation program has been proposed for the same location.

What will be the benefits of the products described above for anadromous fish?

Improve spawning habitat for spring chinook salmon and steelhead by improving vegetative riparian condition, increasing in-channel habitat diversity, and improving streambank stability.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Benefits should become evident within 5 to 10 years and will become more pronounced each following year as vegetation becomes established.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project annual status report will be submitted to the Grande Ronde Model Watershed Program (GRMWP) for 5 years, this report will include photo point monitoring.
Forage utilization will be measured to determine if the riparian management objectives are being met.
Channel conditions, sediment load and water quality determinations will be done periodically when changes to existing conditions are anticipated.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Tybow Canyon Leafy Spurge Project
BPA Project Number: 9704500
BPA Contract Number: 97AI35975
Project Implementor and Address: U.S. Forest Service
La Grande Ranger District, 3502 Hwy 30
La Grande, OR 97850

Project Leader(s): Pete Etchamendy, U.S. Forest Service

Project Description (Short): The project is located in Tybow Canyon in the Burnt Corral Creek watershed. Burnt Corral Creek is a summer steelhead stream. This project employed an integrated approach to control a noxious weed infestation and improve riparian conditions. The project site was treated with herbicides by ground spray equipment and consisted of spot spraying the intended target. This minimized elimination of non-target species by the herbicides. This project will improve riparian conditions by allowing the recovery of natural vegetation. This will benefit downstream fisheries habitat for spring chinook salmon and steelhead.

Location Information:

Site Name (i.e. creek, hatchery): Tybow Canyon in Burnt Corral Creek watershed
Subsite Name (i.e. specific location, legal description): T4S R35E Sec 8, 17 - 20
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Marley Creek

Site Type Description (See Attachment 1): F

Work Type Description (See Attachment 2): V

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? Initial treatment took 1 month, follow up treatments will continue for 3 years.

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $ 10,500.00 BPA Cost Share - $5,000.00

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Treated 40 acres of riparian habitat for noxious weed control to benefit 2.5 miles of stream.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Burnt Corral Creek watershed but this watershed is a tributary of Meadow Creek, which flows into the upper Grande Ronde River. This section of the upper Grande Ronde River is a migration corridor to where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed in the upper Grande Ronde River .

What will be the benefits of the products described above for anadromous fish?

Control a noxious weed infestation and re-establish natural vegetation. Improved vegetation condition will result in improved riparian conditions and less sediment introduced into streams.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Benefits from this project should become apparent within 5 to 10 years.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project annual status report will be submitted to the Grande Ronde Model Watershed Program (GRMWP) for 5 years, this report will include photo point monitoring.
Leafy Spurge populations will be monitored.
Channel conditions, sediment load and water quality determinations will be done periodically when changes to existing conditions are anticipated.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Off-Site Water Developments - La Grande Ranger District
BPA Project Number: 9704600
BPA Contract Number: 97AI35976
Project Implementor and Address: U.S. Forest Service
La Grande Ranger District, 3502 Hwy 30
La Grande, OR 97850

Project Leader(s): Pete Etchamendy, U.S. Forest Service

Project Description (Short): This project is located in the Indian Creek and Five Points Creek watersheds. Indian Creek is the only watershed in the middle Grande Ronde still supporting a spring chinook run. The project constructed a new water development above Indian Creek near Grey Mountain and re-developed an existing water development at Hugh Spring in the Five Points Creek watershed. The water developments will provide livestock with an alternate source of water outside of the riparian areas.

Location Information:

Site Name (i.e. creek, hatchery): Indian Creek & Five Points Creek
Subsite Name (i.e. specific location, legal description): T1S R37E Sec 32, T2S R40E Sec 3 NWNE
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Drumhill Ridge, Gasset Bluff

Site Type Description (See Attachment 1): A

Work Type Description (See Attachment 2): U

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? 3.5 months

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $ 7,050.00 BPA Cost Share - $3,000.00

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Install/improve 2 spring livestock water developments to benefit 2 miles of stream.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Five Points or Indian Creek watersheds. The Five Points watershed flows into the upper Grande Ronde River which is a migration corridor to the section of the upper Grande Ronde River where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed. The Indian Creek watershed is a tributary of the middle Grande Ronde River which is a migration corridor to both the upper Grande Ronde and Catherine Creek where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

Reduce livestock impacts to the riparian area and accelerate recovery of riparian vegetation, increase streambank stability and shade, and reduce sedimentation.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Benefits from this project should become apparent within 5 years and will become more pronounced each following year as vegetation becomes established..

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project annual status report will be submitted to the Grande Ronde Model Watershed Program (GRMWP) for 5 years, this report will include photo point monitoring.
Forage utilization will be measured to determine if the riparian management objectives are being met.
Channel conditions, sediment load and water quality determinations will be done periodically when changes to existing conditions are anticipated.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Lower Five Points Off-Site Water Development
BPA Project Number: 9707000
BPA Contract Number: 97AI35979
Project Implementor and Address: U.S. Forest Service
La Grande Ranger District, 3502 Hwy 30
La Grande, OR 97850

Project Leader(s): Pete Etchamendy, U.S. Forest Service

Project Description (Short): The project will construct a livestock watering pond in the uplands away from the creek to improve riparian conditions on approximately 1 mile of lower Five Points Creek.

Location Information:

Site Name (i.e. creek, hatchery): Lower Five Points Creek near Hwy 84
Subsite Name (i.e. specific location, legal description): T2S R36E Sec 25 SW
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Kamela SE

Site Type Description (See Attachment 1): R

Work Type Description (See Attachment 2): U

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? 3.5 months

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $ 5,500.00 BPA Cost Share - $2,000.00

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Install 1 pond livestock water development to benefit 1 mile of stream.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Five Points watershed but this watershed flows into the upper Grande Ronde River which is a migration corridor to the portion of the upper Grande Ronde River watershed where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed.

What will be the benefits of the products described above for anadromous fish?

This project will allow recovery of riparian vegetation and improve bank stability by providing an alternative water source.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Benefits from this project should become evident within 5 years and will become more pronounced each following year.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

The project final report submitted to the Grande Ronde Model Watershed Program (GRMWP) included before and after project pictures.
A project annual status report will be submitted to the GRMWP for 5 years, this report will include photo point monitoring.
Forage utilization will be measured to determine if the riparian management objectives are being met.
Stream channel conditions, sediment load and water quality determinations will be done periodically when changes to existing conditions are anticipated.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Catherine Creek Riparian Pasture & Off-Site Water Development
BPA Project Number: 9707100
BPA Contract Number: 97AI35982
Project Implementor and Address: U.S. Forest Service
La Grande Ranger District, 3502 Hwy 30
La Grande, OR 97850

Project Leader(s): Pete Etchamendy, U.S. Forest Service

Project Description (Short): The project will install ¾ mile of fence to create a 600-acre holding pasture. A spring and associated riparian area will be fenced and the water piped to a trough outside of the enclosure. This pasture/water development will reduce duration and intensity of livestock grazing in riparian areas and enable more control of livestock in the fall when livestock are being removed from the allotment.

Location Information:

Site Name (i.e. creek, hatchery): Little Catherine Creek
Subsite Name (i.e. specific location, legal description): T5S R41E Sec 9
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Little Catherine Creek

Site Type Description (See Attachment 1): F, A

Work Type Description (See Attachment 2): B, U, O

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 12/31/98

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 13,900.00 BPA Cost Share - $6,200.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Build 0.75 miles of fence to create a 600-acre holding pasture to reduce livestock impacts to approximately 1 mile of stream.
Install 1 spring/trough livestock water development to reduce livestock impacts to approximately 1 mile of stream.

Are salmon production/supplementation activities planned or currently being implemented in this watershed?

Yes, a captive brood stock program has been conducted in Catherine Creek and an endemic spring chinook salmon supplementation program has been proposed for the same location.

What will be the benefits of the products described above for anadromous fish?

This project will reduce duration and intensity of livestock grazing in the upper reaches of Little Catherine Creek which will accelerate recovery of riparian vegetation, increase streambank stability, reduce sedimentation and improve in water quality.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Benefits from this project should be evident within 5 years and will become more pronounced each following year as vegetation becomes established.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project annual status report will be submitted to the Grande Ronde Model Watershed Program (GRMWP) for 5 years, this report will include photo point monitoring.
Forage utilization will be measured to determine if the riparian management objectives are being met.
Channel conditions, sediment load and water quality determinations will be done periodically when changes to existing conditions are anticipated.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS PROJECT REVIEW

Project Name: Upper Grande Ronde River & Sheep Creek Instream Structure Modifications
BPA Project Number: 9707200
BPA Contract Number: 97AI35983
Project Implementor and Address: U.S. Forest Service
La Grande Ranger District, 3502 Hwy 30
La Grande, OR 97850

Project Leader(s): Paul Boehne, U.S. Forest Service

Project Description (Short): The project is located within a 3 mile reach of the Upper Grande Ronde River and a 2.5 mile reach of Sheep Creek. These reaches currently provide spawning and rearing habitat for spring/summer chinook salmon, summer steelhead, redband trout, and potential habitat for bull trout. A tracked excavator was used to create new pools, add whole trees, other woody material (e.g. root wads, thinning slash), and boulders to approximately 1.3 miles of stream. These additions were placed in such a manner as to reduce the probability that they will be moved downstream and out of the project area. Existing instream structures that were adversely affecting channel morphology were repositioned, removed or modified. Sediment-trapping geo-textile fabric (constructed with biodegradable coconut fibers and wood chips) were placed immediately downstream of each work-site in the project area. This mat trapped a majority of the redistributed sediments moved by instream work. The mats were then removed from the stream channel and placed on eroded streambanks within the project area. These sediment-filled mats were used as soil beds where riparian shrubs and/or small trees were planted.

Location Information:

Site Name (i.e. creek, hatchery): Upper Grande Ronde River from Woodley Campground upstream 3mi, Sheep Creek from NFS boundary upstream 2.5mi
Subsite Name (i.e. specific location, legal description): T6S R35E Sec 11 SE, 12 NW, 14, 23, T6S R36E Sec 4, 9, 10.
County & State: Union County, Oregon
Hydrounit Number : 17060104
Quad Map(s): Fly Valley, Limber Jim Creek

Site Type Description (See Attachment 1): S

Work Type Description (See Attachment 2): C, V

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing

monitoring & evaluation activities)? 1.5 months

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $ 35,820.00 BPA Cost Share - $17,650.00

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Placed 30 boulders in 1.3 miles of stream.
Constructed 44 new pools in 1.3 miles of stream.
Removed, modified or repositioned 35 structures that adversely affected channel widening.
Placed 105 whole trees with root wads, and 255 pieces of slash added to existing structures.
Placed sediment filled geo-textile mats on eroded streambanks and planted with riparian shrubs/trees.

Are salmon production/supplementation activities planned or currently being implemented in this watershed?

Yes, a captive brood stock program has been conducted in the upper Grande Ronde River and occasional releases are made into Sheep Creek; an endemic spring chinook salmon supplementation program has been proposed for the same location.

What will be the benefits of the products described above for anadromous fish?

Increase pool habitat complexity to provide improved habitat for both juvenile and adult spring/summer chinook salmon. Increase streambank stability, reduce channel width, increase the density of streamside vegetation, increase the sediment storage capacity of the channel, accelerate the natural accumulation of large woody material, and increase the residence time of water in the riparian area and associated wetland habitat.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Increased fish habitat diversity and hiding cover will become available immediately and will persist and increase with each following year. The remaining benefits should become apparent within 5 years and should continue to improve in following years.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

The project final report submitted to the Grande Ronde Model Watershed Program (GRMWP) included pre- and post-project pictures.
Annual project status reports will be submitted to the GRMWP for 5 years, this report will include photo point monitoring.
Channel cross sections at the upper Grande Ronde River site were established before the project and will be monitored in 1998, 2000, and 2002.
USFS completed stream surveys of the upper Grande Ronde River site in 1997 and will resurvey bi-annually.
ODFW and USFS have conducted fish sampling in the upper Grande Ronde River site.
Spring/summer chinook salmon redd counts are conducted annually by the ODFW within the project area.
Long-term water quality monitoring is conducted by the USFS in upper Grande Ronde River.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Camp Creek Riparian Exclusion Fence & Off-Site Water Development
BPA Project Number: 9707500
BPA Contract Number: 97AI35986
Project Implementor and Address: U.S. Forest Service
La Grande Ranger District, 3502 Hwy 30
La Grande, OR 97850

Project Leader(s): Pete Etchamendy, U.S. Forest Service

Project Description (Short): This project is located along Camp Creek in the upper Indian Creek watershed and in the North Fork Clark Creek watershed. Indian Creek is a focus area of the GRMWP and is noted for high-quality Snake River spring chinook habitat in the upper watershed. The project will construct approximately 3 miles of riparian fence and 2 cattleguards along Camp Creek which will eliminate livestock access to approximately 2 miles of the upper reaches of Indian Creek and Camp Creek. This project will also install a trough at a spring near the North Fork of Clark Creek. The spring development will include protection of the water source by fencing. The water development will provide livestock with an off-stream water source.

Location Information:

Site Name (i.e. creek, hatchery): Camp Creek of the upper Indian Creek subwatershed and North Fork Clark Creek subwatershed.
Subsite Name (i.e. specific location, legal description): T2S R40E Sec 13 SE, T1S R41E Sec 7 SWNE, 17, 18
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Mount Moriah

Site Type Description (See Attachment 1): F, A

Work Type Description (See Attachment 2): B, U

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 7/1/98

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $ 40,000.00 BPA Cost Share - $23,500.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Three miles of riparian exclusion fence to protect 2 miles of stream and 24 acres of riparian habitat. One spring livestock water development to benefit approximately 1 mile of stream.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Indian Creek and Clark Creek watersheds but these watersheds are tributaries of the middle Grande Ronde River which is a migration corridor to the upper Grande Ronde River and Catherine Creek where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

The purpose of this project is to accelerate vegetative recovery on Camp Creek and North Fork Clark Creek. Vegetative recovery will improve streambank stabilization, reduce sedimentation, and in the long-term maintain cooler stream temperatures.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Benefits from this project should become apparent within 5 years and increase in the following years.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Annual project status reports will include photo point monitoring photos. Reports will be submitted to the GRMWP for 5 years.
Forage utilization will be measured to determine if the riparian management objectives are being met.
Channel conditions, sediment load and water quality determinations will be done periodically when changes to existing conditions are anticipated.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: 1997 Camp One Restoration
BPA Project Number: 9707600
BPA Contract Number: 97AI35987
Project Implementor and Address: U.S. Forest Service
La Grande Ranger District, 3502 Hwy 30
La Grande, OR 97850

Project Leader(s): Paul Boehne, U.S. Forest Service

Project Description (Short): This project will obliterate and block motorized access on 2 miles of U.S. Forest Service improved roads and ½ mile of primitive roads. The system roads will be obliterated and hill slopes restored. Roads will be blocked with boulders and rootwads. To address the causes of these problems the district will pursue a promulgated area closure for the area surrounding Forest Service roads and Camp One. This will make it illegal for full-sized vehicles to travel in the area, and for off-road vehicles to drive anywhere except on designated trails. Obliterated roads and primitive roads will be planted with appropriate native conifers or hardwood shrubs and trees. Tributary areas will be planted with native vegetation. Fencing in coordination with the USFS permittee on the Five Points allotment will be pursued to protect plantings.

Location Information:

Site Name (i.e. creek, hatchery): Camp One Area - Lower Five Points Creek Watershed
Subsite Name (i.e. specific location, legal description): T2S R37E Sec 4 , 9, 10
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Drumhill Ridge

Site Type Description (See Attachment 1): E

Work Type Description (See Attachment 2): E

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? 3.5 months

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $18,993.00 BPA Cost Share - $9,760.00

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Obliterated and revegetated 2.5 miles of road.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Five Points watershed but this watershed flows into the upper Grande Ronde River which is a migration corridor to the portion of the upper Grande Ronde River watershed where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed.

What will be the benefits of the products described above for anadromous fish?

Decreased sediment delivery rates to sensitive fisheries habitat. Native vegetation restored to disturbed upland areas and riparian areas.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Reduced sediment delivery from road erosion/runoff will be evident immediately and will become more pronounced each following year as vegetation becomes established. Restoration of upland and riparian vegetation should become apparent within 2 years and continue to improve in the following years.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

The project final report submitted to the Grande Ronde Model Watershed Program (GRMWP) included before and after project pictures. Photographs will be retaken in the spring of 1998 for comparison with photos taken immediately after project implementation.
Annual project status reports will be submitted to the GRMWP for 5 years.
Long-term water quality monitoring is being conducted by USFS in Five Points Creek.
A Proper Functioning Condition (PFC) assessment will be done in Five Points Creek and will help identify additional monitoring needs.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Middle Fork Clark Creek Crossing Improvement
BPA Project Number: 9702800
BPA Contract Number: 97AP34219
Project Implementor and Address: Union County
Public Works Dept., PO Box 1103
La Grande, OR 97850

Project Leader(s): Richard Comstock, Union County

Project Description (Short): This project is located in the Clark Creek watershed which is used by summer steelhead for spawning and rearing. A high water event in February 1996 transported large quantities of debris and bed load which plugged a marginally sized metal culvert. The channel re-routed and washed large volumes of additional sediment into the system. This project will replace a damaged culvert with a small bridge. The bridge will be sized to meet the anticipated flow during a 50-year event.

Location Information:

Site Name (i.e. creek, hatchery): Clark Creek Road on Middle Fork Clark Creek just upstream of confluence with Clark Creek
Subsite Name (i.e. specific location, legal description): T1S R40E Sec 4 NWNW
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Cricket Flat

Site Type Description (See Attachment 1): E, ?S

Work Type Description (See Attachment 2): E, ?C

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? The project final report which will indicate the work dates for this project has not been submitted to the Grande Ronde Model Watershed Program (GRMWP) yet.

Was the project completed within the original budget? Yes: No: X

If no, what caused cost overruns? A modification was made to the BPA contract to add $10,000 to provide the increased cost of changing from a culvert to a bridge installation.

What was the overall cost of the project? $ 40,800.00 BPA Cost Share - $25,950.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Replace undersized culvert with bridge.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Clark Creek watershed but this watershed flows into the middle Grande Ronde River which is a migration corridor to the upper Grande Ronde River and Catherine Creek where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

Reduce sediment delivery to the mainstem Clark Creek and the Grande Ronde River and provide for year-round steelhead passage. Reduced sediment will improve resident trout and steelhead production in Clark Creek.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Reduction in sediment delivery and improvements to fish passage should be evident immediately.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project final report with pre- and post-project pictures will be submitted to the Grande Ronde Model Watershed Program (GRMWP).
A project annual status report will be submitted to the GRMWP for 5 years.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Phillips Creek Road Stabilization and Obliteration
BPA Project Number: 9702700
BPA Contract Number: 97AP34227
Project Implementor and Address: U.S. Forest Service
Walla Walla Ranger District, 1415 W. Rose
Walla Walla, WA 99362

Project Leader(s): Steve Anderson, U.S. Forest Service

Project Description (Short): This project is located in the Phillips Creek subwatershed, Phillips Creek is a summer steelhead stream. The project will improve drainage structures, replace inadequate culverts and outslope a road needed for long-term land management. Four miles of long-term road will be closed and four additional miles of road will be obliterated.

Location Information:

Site Name (i.e. creek, hatchery): Phillips Creek Subwatershed
Subsite Name (i.e. specific location, legal description): T1N R38E Sec 3 NENW, T2N R38E Sec 28 SW, Sec 33, 34 NW
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Sanderson Spring

Site Type Description (See Attachment 1): E

Work Type Description (See Attachment 2): E

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 12/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 11,000.00 BPA Cost Share - $6,250.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Close, stabilize, replace culverts, and improve drainage on 4 miles of road.
Obliterate 4 miles of road.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Phillips Creek watershed but this watershed is a tributary of the middle Grande Ronde River which is a migration corridor to the upper Grande Ronde River and Catherine Creek where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

Improve water quality by reducing sediment from roads.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Reduced sediment delivery from road erosion/runoff will become evident immediately and more pronounced each following year as more vegetation becomes established.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project annual status report will be submitted to the Grande Ronde Model Watershed Program (GRMWP) for 5 years, this report will include photo point monitoring.
Road deficiency surveys will be examined at 1 and 3 years after the project, closed roads will be surveyed on a 3 to 5 year cycle after initial monitoring.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Bailey Creek Spawning Recovery
BPA Project Number: 9703200
BPA Contract Number: 97AP34995
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Union Soil and Water Conservation District

Project Description (Short): This project is located on private lands in Bailey Creek, a tributary to Phillips Creek. Phillips Creek is a steelhead stream and Bailey Creek has the potential to rear steelhead. Recent fish surveys by ODFW show a potential of about .75 miles of steelhead spawning and rearing habitat upstream of an existing culvert which is blocking passage. The project will remove the existing culvert and log structure that block fish passage and replace it with an arch culvert or a bridge.

Location Information:

Site Name (i.e. creek, hatchery): Bailey Creek in Phillips Creek Watershed.
Subsite Name (i.e. specific location, legal description): T1N R38E Sec 11 SW
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Sanderson Spring

Site Type Description (See Attachment 1): E, S

Work Type Description (See Attachment 2): E, C

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 09/30/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 9,825.00 BPA Cost Share - $7,285.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Replace existing culvert that blocks fish passage with arch culvert or bridge.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Phillips Creek watershed but this watershed drains into the middle Grande Ronde River which is a migration corridor to the upper Grande Ronde River and Catherine Creek where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

Restore access by adult steelhead to approximately .75 miles of potential spawning habitat by removing an impassable culvert and replacing it with a structure that will pass fish at all flows.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Access to potential spawning habitat will become available immediately.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project annual status report will be submitted to the Grande Ronde Model Watershed Program (GRMWP) for 5 years, this report will include photo point monitoring.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS PROJECT REVIEW

Project Name: Bingaman Dike Set Back
BPA Project Number: 9703200
BPA Contract Number: 97AP34995
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Union Soil and Water Conservation District

Project Description (Short): An existing dike will be removed and a new dike will be constructed further from the streambank. A drainpipe will be installed through the dike to allow ponded water to drain back to the river when peak flows recede. A natural flood plain/wetland area, approximately 10 acres, will be re-established between the river and the new dike. The new wetland area will be seeded for stability. The re-established flood plain will serve as a filter strip to reduce sediment and nutrient inputs to the river.

Location Information:

Site Name (i.e. creek, hatchery): Grande Ronde River
Subsite Name (i.e. specific location, legal description): T1S R39E Sec 15 NW, 16 NE
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Imbler

Site Type Description (See Attachment 1): W

Work Type Description (See Attachment 2): V

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? The project final report, which will indicate the work dates for this project, has not been submitted to the Grande Ronde Model Watershed Program (GRMWP) yet.

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $ 48,811.00 BPA Cost Share - $36,621.00

(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Relocate dike back from river edge to create 10-acre wetland/flood plain.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the middle Grande Ronde River but this is a migration corridor to the upper Grande Ronde River and Catherine Creek where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

Improved water quality for fish from re-establishing a larger functional flood plain. Preliminary studies indicate this area may also be used for winter rearing of spring chinook and steelhead.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Out-of-bank flow will begin interacting with the flood plain which will be accessible when any future high water events occur.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Annual project status reports, to include photo point monitoring photos, will be submitted to the GRMWP for 5 years.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Elk Mountain Stream Habitat Enhancement
BPA Project Number: 9703200
BPA Contract Number: 97AP34995
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Union Soil and Water Conservation District

Project Description (Short): This project is located in and around Rock Creek and Little Rock Creek, tributaries to the upper Grande Ronde River. Both of these streams are anadromous fish streams, with steelhead spawning and rearing in the upper reaches. The project will build a 3/4 mile cross-fence to improve livestock management and distribution. Three springs will be developed to provide off-stream livestock watering. Both of these activities will redistribute livestock use from riparian areas to the uplands. Coniferous trees and deciduous shrubs will be planted along sections of Rock Creek to improve riparian vegetation and increase streamside shading. Large woody debris will be placed to enhance instream habitat. Three bridge stream crossings will be constructed to enhance fish passage and reduce stream sediment.

Location Information:

Site Name (i.e. creek, hatchery): Rock Creek & Little Rock Creek
Subsite Name (i.e. specific location, legal description): T4S R37E Sec 3 SE, 11, 12 NE, T4S R38E Sec 7 NW, 17 SW, 18 NE, 20 SW
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): La Grande Reservoir, Glass Hill

Site Type Description (See Attachment 1): U, A, E, S, F

Work Type Description (See Attachment 2): B, U, E, C, V, O

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 09/30/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds
.

If no, what caused cost overruns?

What was the overall cost of the project? $ 44,045.00 BPA Cost Share - $25,702.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Build 0.75 miles of cross fencing to improve livestock management and distribution on 1,300 acres and benefit 2.25 miles of stream by redistributing livestock use from riparian areas to the uplands.
Install 3 spring livestock water developments to redistribute livestock use from riparian areas to the uplands.
Construct 3 bridge stream crossings to enhance fish passage and reduce sediment.
Place large woody material in stream and plant coniferous trees and deciduous shrubs along 2.25 miles of stream.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Rock Creek watershed but this watershed flows into the upper Grande Ronde River which is a migration corridor to the portion of the upper Grande Ronde River watershed where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed.

What will be the benefits of the products described above for anadromous fish?

Reduce sedimentation and stream temperatures, increase instream habitat diversity, and improve riparian conditions and fish passage.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Stream sedimentation should be reduced immediately with continued improvement over the following years. Instream habitat diversity and fish passage should improve immediately and should show continued improvement over the years. Riparian vegetative condition and stream temperature should show some improvement in 2 to 3 years with more improvement in 5 to10 years.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project annual status report will be submitted to the Grande Ronde Model Watershed Program (GRMWP) for 5 years, this report will include photo point monitoring.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are “before and after” photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Grande Ronde/Nesley Ditch Irrigation Reorganization
BPA Project Number: 9703200
BPA Contract Number: 97AP34995
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Union Soil and Water Conservation District

Project Description (Short): This project when completed will construct and put into operation a more permanent water diversion facility that will eliminate an annually constructed cobble pushup dam. Phase I of the project, completed in 1996, concentrated on stabilizing eroding streambanks and constructing the sump to replace the annually constructed cobble pushup dam. This project will complete phase II of the project by installing a high volume/low pressure pump and 350 feet of pipe to transport water from the constructed sump to a ditch.

Location Information:

Site Name (i.e. creek, hatchery): Grande Ronde River, rm 158 at Nesley Ditch diversion
Subsite Name (i.e. specific location, legal description): T2S R38E Sec 32 SESW
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): La Grande

Site Type Description (See Attachment 1): D

Work Type Description (See Attachment 2): C, N

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 09/30/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 38,275.00 BPA Cost Share - $19,675.00

(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Complete construction of infiltration gallery.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the middle Grande Ronde River but this is a migration corridor to the upper Grande Ronde River where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed.

What will be the benefits of the products described above for anadromous fish?

Improve fish passage and conserve water to increase stream flows. Eliminate potential disturbance of migrating and resident salmonids by instream equipment use. Improve water use efficiency by precisely controlling withdrawals. Demonstrate an alternative water withdrawal method.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Benefits of this project should be evident immediately.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project final report with pre- and post project pictures will be submitted to the Grande Ronde Model Watershed Program (GRMWP).
A project annual status report will be submitted to the GRMWP for 5 years.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS PROJECT REVIEW

Project Name: Mt Harris/Beck Water Development
BPA Project Number: 9703200
BPA Contract Number: 97AP34995
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Union Soil and Water Conservation District

Project Description (Short): This project is located in the Indian Creek watershed, tributary of the middle Grande Ronde. Indian Creek is the only watershed in the middle Grande Ronde still supporting a spring chinook run. An existing spring-fed pond will be cleaned, a fence will enclose about one acre around the pond, pond water will be piped to a trough located outside the exclusion area. Livestock use of riparian areas is expected to decrease with corresponding improvements in riparian condition.

Location Information:

Site Name (i.e. creek, hatchery): Little Indian Creek Tributary
Subsite Name (i.e. specific location, legal description): T2S R40E Sec 6 SE
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Gasset Bluff

Site Type Description (See Attachment 1): A

Work Type Description (See Attachment 2): U

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? The project final report, which will indicate the work dates for this project, has not been submitted to the Grande Ronde Model Watershed Program (GRMWP) yet.

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $ 4,640.00 BPA Cost Share - $2,820.00

(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Clean and fence 1 spring fed pond and pipe to trough, this development should benefit 1 mile of stream.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Indian Creek watershed but this watershed is a tributary of the middle Grande Ronde River which is a migration corridor to the upper Grande Ronde River and Catherine Creek where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

Increase forage utilization in the uplands, decrease utilization in the riparian area, stabilize streambanks, improve condition of riparian vegetation.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Benefits should be evident within 5 to 10 years.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project annual status report will be submitted to the Grande Ronde Model Watershed Program (GRMWP) for 5 years, this report will include photo point monitoring.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Willow Creek Fish Passage
BPA Project Number: 9703200
BPA Contract Number: 97AP34995
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Adam Schumacher, Oregon Dept. of Fish and Wildlife

Project Description (Short): This project is located on Willow Creek, which enters the Grande Ronde River at the lower end of the Grande Ronde valley. Willow Creek supports a run of summer steelhead and may receive some juvenile spring chinook use in its lower reach. The project will construct a permanent fish passage facility at an irrigation diversion dam, consisting of three log weirs and a steel fishway. Eroding streambanks below the diversion will be stabilized with hardwood plantings.

Location Information:

Site Name (i.e. creek, hatchery): Willow Creek
Subsite Name (i.e. specific location, legal description): T1S R39E Sec 9 NW
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Imbler

Site Type Description (See Attachment 1): D, P

Work Type Description (See Attachment 2): C, V

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 09/30/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: No: X

If no, what caused cost overruns?

A modification was made to the BPA contract to add $10,000 for an engineering contingency to cover possible construction overruns.

What was the overall cost of the project? $ 47,200.00 BPA Cost Share - $43,200.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Construct a permanent fish passage facility at an irrigation diversion dam, consisting of 3 log weirs and a steel fishway.
Stabilize eroding streambanks below the diversion with hardwood plantings.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in Willow Creek but this stream is a tributary of the middle Grande Ronde River which is a migration corridor to the upper Grande Ronde River and Catherine Creek where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

The objective of the project is to provide fish passage over an irrigation diversion at all flows and to stabilize eroding streambanks and reduce sediment.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Improved fish passage from construction of the permanent diversion should be immediate. Increased streambank stability should become apparent within 5 years and should persist and improve each following year.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project final report will be submitted to the GRMWP.
Pre- and post-project photos will be taken.
ODFW will conduct periodic checks during low flow to confirm operation of the structure for fish passage.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS PROJECT REVIEW

Project Name: Upper Grande Ronde River Riparian Fencing
BPA Project Number: 9703300
BPA Contract Number: 97AP35314
Project Implementor and Address: Oregon Dept. of Fish and Wildlife
107 20th St.
La Grande, OR 97850

Project Leader(s): Vance McGowan, Oregon Dept. of Fish and Wildlife

Project Description (Short): ODFW will construct 5.1 miles of livestock exclusion fence along 5 miles of the Grande Ronde River. This will eliminate grazing of 180 acres of riparian habitat. Due to high spring flows and winter icing, the fence will be located a minimum of 100 feet from the high water line. This will reduce long-term maintenance. Red Bridge State Park will supply fence materials to strengthen an existing fence along the park's northwest and west property lines. If necessary, a fence will be built along property boundaries by cooperating private landowners to prevent cattle access down slope to the river. After 1-3 years of natural vegetative recovery, trees, shrubs, or seed grasses will be planted in selected areas that are slow to recover. ODFW and a private landowner will install instream habitat structures (primarily large woody debris to create holding/rearing pools) and 2 spring livestock water developments. These activities will be coordinated with landowner timber harvest activities, such as use of landowner equipment to transport and place large cull trees with root wads. Large wood will be cabled into place to prevent downstream migration onto adjacent state or private lands.

Location Information:

Site Name (i.e. creek, hatchery): Upper Grande Ronde River near Red Bridge State Park
Subsite Name (i.e. specific location, legal description): T3S R35E Sec 25 SE, T3S R36E Sec 19 SESE, 20, 21 NWNW, 29 NW, 30, 31 NWNW
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Kamela SE

Site Type Description (See Attachment 1): A, S, F

Work Type Description (See Attachment 2): C, B, U, V

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 12/31/1998

If yes, how long did the project take from start to finish (not including ongoing

monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: No: X

If no, what caused cost overruns?

A modification was made to the BPA contract to add $1,100 to complete an additional 0.6 miles of fence.

What was the overall cost of the project? $ 56,240.00 BPA Cost Share - $33,020.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Place large woody material in approximately 2 miles of stream.
Build 5.1 miles of riparian exclosure fence to protect 180 acres of riparian habitat.
Plant trees, shrubs or grasses in riparian areas.
Install 2 solar powered spring livestock water developments.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in this section of the upper Grande Ronde River but this is a migration corridor to the section of the upper Grande Ronde River watershed where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed.

What will be the benefits of the products described above for anadromous fish?

Restore degraded riparian habitat, and improve instream habitat diversity by controlling livestock access to the riparian area.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Increased fish habitat diversity and hiding cover will become available immediately and will persist and increase with each following year. The remaining benefits should become apparent within 5 years and should continue to improve each following year.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Photo point monitoring.
Annual project status reports.
Other monitoring such as installing stream thermographs, fish or vegetation surveys, etc. may be done at ODFW's discretion.

The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Union SWCD - Monitoring Equipment
BPA Project Number: 9703600
BPA Contract Number: 97AP35315
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Ken Diebel, Union Soil and Water Conservation District

Project Description (Short): The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This project will purchase Statistical Package for the Social Sciences (SPSS) version 7.5 to help compile and analyze the basin-wide monitoring data.

Location Information:

Site Name (i.e. creek, hatchery): Union Soil and Water Conservation District Office in La Grande, Oregon.
Subsite Name (i.e. specific location, legal description): N/A
County & State: Union County, Oregon
Hydrounit Number: N/A
Quad Map(s): N/A

Site Type Description (See Attachment 1): L

Work Type Description (See Attachment 2): A

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? 1 day

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $ 2,075.00 BPA Cost Share - $2,075.00

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Purchased one copy of SPSS statistical analysis program to assist in monitoring program.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? N/A

What will be the benefits of the products described above for anadromous fish?

To enhance the ability of the Model Watershed to carry out their effectiveness monitoring of watershed restoration projects employed to benefit anadromous fish in the Grande Ronde River basin.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Immediately

Were monitoring and evaluation activities undertaken in association with the project?

Yes: **No**: X

If Yes, list types and duration of monitoring:

Are "before and after" photographs of the project site available? **Yes:** **No**: X

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: 1997 Whole Tree Project
BPA Project Number: 9707400
BPA Contract Number: 97AP35782
Project Implementor and Address: U.S. Forest Service
La Grande Ranger District, 3502 Hwy 30
La Grande, OR 97850

Project Leader(s): Paul Boehne, U.S. Forest Service

Project Description (Short): Whole conifer trees will be transported via helicopter from upslope positions to the Grande Ronde River channel. A tracked excavator will be used to position trees and boulders within the active channel. Trees and boulders will be placed to facilitate sediment storage within the channel, protect eroding banks during high flows and to aid development of pool habitat. Trees will be located to enhance the development of point bars and to collect other woody debris transported during high flows. Some trees will be anchored to each other or to large boulders to limit downstream migration during the first couple of years.

Location Information:

Site Name (i.e. creek, hatchery): Grande Ronde River from FS 5115 road upstream to FS boundary.
Subsite Name (i.e. specific location, legal description): T5S R35E Sec 1, 2 SWNE, 12, 13 NE, T5S R36E Sec 18 SW
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Marley Creek & Little Beaver Creek

Site Type Description (See Attachment 1): S

Work Type Description (See Attachment 2): C

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? 2 months

Was the project completed within the original budget? Yes: No: X

If no, what caused cost overruns? A modification was made to the BPA contract to add $10,000 for increased costs for helicopter and excavator time.

What was the overall cost of the project? $ 187,363.00 BPA Cost Share - $75,000.00

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Placed 144 whole trees with rootwads in 3.7 miles of stream.
Placed boulders in strategic locations within 3.7 miles of stream.

Are salmon production/supplementation activities planned or currently being implemented in this watershed?

Yes, a captive brood stock program has been conducted in upper Grande Ronde River at Vey Meadows and an endemic spring chinook salmon supplementation program has been proposed for the same location.

What will be the benefits of the products described above for anadromous fish?

Increased fish habitat diversity, hiding cover, and pool frequency. Reduced sediment loads from improved bank stability and increased sediment storage capacity of the stream channel. Enhanced channel integrity and riparian area conditions and improved interaction between the two entities.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Increased fish habitat diversity and hiding cover will become available immediately and will persist and increase with each following year. The remaining benefits should become apparent within 5 years and should continue to improve each following year.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

The project final report submitted to the Grande Ronde Model Watershed Program (GRMWP) indicated that permanent photograph points were established and will be taken for at least 5 years.
Annual project status reports will be submitted to the GRMWP for 5 years.
Stream channel surveys to evaluate changes in habitat types, habitat quality, bank stability, and channel morphology were conducted prior to project implementation and will continue for at least 5 years.
Long-term water quality monitoring is conducted by the USFS in the upper Grande Ronde River. The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality

conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS PROJECT REVIEW

Project Name: Upper Grande Ronde River Riparian Rehabilitation
BPA Project Number: 9707300
BPA Contract Number: 97AP35788
Project Implementor and Address: U.S. Forest Service
La Grande Ranger District, 3502 Hwy 30
La Grande, OR 97850

Project Leader(s): Julie Baird, U.S. Forest Service

Project Description (Short): This project is located along streams throughout the upper Grande Ronde River drainage. This project will thin trees along targeted streams to increase the size and number of available large wood recruits while maintaining optimum stream shade and bank stabilization. The project will treat approximately 200 acres of riparian habitat. Thinning will leave the largest, healthiest, most full-crowned and vigorous trees in the stand that meet species and spacing requirements. La Grande Ranger District fisheries and silviculture personnel will determine tree spacing. Trees greater than 9 inches DBH will not be cut. Shrub species as well as deciduous trees will not be cut except to access targeted "cut" trees. Trees will be directionally felled into the stream channels. Dominant snags within thinning units will be maintained on site to provide wildlife habitat.

Location Information:

Site Name (i.e. creek, hatchery): Dark Canyon tributary, Little Dark Canyon & tributary, West Chicken Creek & tributary, Sheep Creek, Meadow Creek tributary, South Fork & North Fork Limber Jim Creek, Waucup Creek & tributary, Grande Ronde River and tributary, Lookout Creek, Fly Creek & tributary.
Subsite Name (i.e. specific location, legal description): T2S R35E Sec 27 SW, 28, 33 NE, 34, T3S R33.5E Sec 13, 14, 23 NE, 24,35 SE, T3S R33E Sec 12 SW, 35 NE, T4S R33.5E Sec 2 NE, 11 , T5S R34E Sec 17, 20 NWNW, 25, T5S R35E Sec 12,13 SW, 24 NW, T5S R36E Sec 16, 20 NE, 21 NW, 27, 34, T6S R35.5E Sec 10 SE, 15 NE, 27, T6S R35E Sec 22 SE
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): McIntyre Creek, Tamarack Gulch, Bally Mountain, Lehman Springs, Tower Mountain, Sullivan Gulch, Limber Jim Creek, Fly Valley

Site Type Description (See Attachment 1): F

Work Type Description (See Attachment 2): V

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 12/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 33,800.00 BPA Cost Share - $15,400.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Thin trees in approximately 200 acres of riparian habitat along targeted streams to increase the size and number of available large wood recruits while maintaining optimum stream shade and bank stabilization.

Are salmon production/supplementation activities planned or currently being implemented in this watershed?

Yes, a captive brood stock program has been conducted in the upper Grande Ronde River and Sheep Creek watersheds.. An endemic spring chinook salmon supplementation program has been proposed for the same location. This project includes areas within the portion of the watershed that is being supplemented and areas that flow into the migration corridor for the supplemented watershed.

What will be the benefits of the products described above for anadromous fish?

Improve riparian condition by thinning overcrowded timber stands along streams. Increase sediment storage by adding felled trees to the stream channels. Improve sediment storage high in the drainage, out of fish-bearing channels, and slow the routing of sediment downstream.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Improvements will start to become evident within 5 years and will gradually increase for many decades into the future.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Annual project status reports will be submitted to the GRMWP for 5 years
Photo point monitoring will be conducted.
Stand exams to determine increases in growth rate and crown density (shading) will be conducted at 3, 5, 10, and 20 years.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Catherine Creek Streambank Stabilization & Spring Chinook Habitat Enhancement
BPA Project Number: 9707800
BPA Contract Number: 97AP36073
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Allan Bahn, Natural Resources Conservation Service

Project Description (Short): The project includes activities at 4 individual sites. Component 1, Streambank Stabilization and Habitat Enhancement at City of Union Water Treatment Plant, will install 4 vegetated rock barbs and a buried log to control the thread of the stream and improve chinook instream habitat. This will reduce the potential for damage to the treatment plant and possible discharge of untreated sewage into Catherine Creek. Component 2, Urban Streambank Stabilization and Habitat Enhancement within City of Union, will install vegetated rock barbs, a rock vortex weir, buried logs, and replace cement rip-rap with rock rip rap to stabilize the stream bank and enhance chinook instream habitat. Component 3, Spring Chinook Rearing Habitat Enhancement at City of Union Intake Ponds, will construct a fish laddered weir between 2 ponds and a controlled-laddered inlet at a blocked culvert between a pond and Catherine Creek to improve juvenile fish passage. This will allow the 2 ponds to function as rearing habitat throughout the winter without the risk of trapping juvenile fish. Component 4, Spring Chinook Rearing Habitat Channel Construction within City of Union, will construct a diversion from Catherine Creek to provide continuous flow between Catherine Creek and an old secondary channel of the creek.

Location Information:

Site Name (i.e. creek, hatchery): Catherine Creek in City of Union (City of Union Treatment Plant, City Union Intake Ponds, & 2 urban locations along Catherine Creek.
Subsite Name (i.e. specific location, legal description): T4S R39E Sec 13 SW, T4S R40E Sec 18 SWSE, Sec 19 NWNW, Sec 28 NW.
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Craig Mountain, Union

Site Type Description (See Attachment 1): S, D, P

Work Type Description (See Attachment 2): C, D

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 10/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 62,300.00 BPA Cost Share - $40,200.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Install 8 vegetated rock barbs.
Bury 1 log between vegetated rock barbs.
Install 1 rock vortex weir with buried logs.
Remove cement rip rap and replace with rock rip rap on 0.02 miles of stream.
Install fish passage ladder between Catherine Creek and side channels/pools that provide juvenile spring chinook rearing habitat.
Install a fish laddered weir between 2 ponds that provide juvenile spring chinook rearing habitat.
Construct secondary channel (190') to create juvenile spring chinook wintering habitat.

Are salmon production/supplementation activities planned or currently being implemented in this watershed?

Yes, a captive brood stock program has been conducted in Catherine Creek and an endemic spring chinook salmon supplementation program has been proposed for the same location.

What will be the benefits of the products described above for anadromous fish?

Reduce erosion and sedimentation of chinook salmon spawning habitat. Improve juvenile chinook salmon passage and winter rearing habitat.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Improvements for juvenile chinook salmon passage and winter rearing habitat should become available immediately. Reduction of erosion and sedimentation should become evident within 2 to 3 years and continue to improve each following year.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Photo point monitoring will be conducted in years 1, 3 and 5 following completion of the project. The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Catherine Creek/Shelden/Sheehy Irrigation and Waterway Improvements
BPA Project Number: 9707800
BPA Contract Number: 97AP36073
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Greg Kuehl, Natural Resources Conservation Service

Project Description (Short): This project will increase streambank stability and streamside shading by installing 4 rock barbs in Catherine Creek and building a 600 foot riparian livestock exclusion fence. Converting 2 irrigation systems will enhance irrigation efficiency. One system will be converted from flood to sprinkler irrigation and the other from flood to gated pipe. Irrigation delivery system water losses will be addressed by piping excess irrigation flow back into Catherine Creek and eliminating ½ mile of leaky irrigation ditch.

Location Information:

Site Name (i.e. creek, hatchery): Catherine Creek below City of Union
Subsite Name (i.e. specific location, legal description): T4S R39E Sec 13 SWSW, 14 SE
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Craig Mountain

Site Type Description (See Attachment 1): S, F, U

Work Type Description (See Attachment 2): C, B, N, O

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 10/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 51,250.00 BPA Cost Share - $34,425.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Install 4 rock barbs.
Construct 0.11 miles of riparian exclosure fence to protect 0.11 miles of stream.
Convert one irrigation system from flood to sprinkler irrigation to improve irrigation efficiency.
Convert one irrigation system from flood to gated pipe to improve irrigation efficiency.

Are salmon production/supplementation activities planned or currently being implemented in this watershed?

Yes, a captive brood stock program has been conducted in Catherine Creek and an endemic spring chinook salmon supplementation program has been proposed for the same location.

What will be the benefits of the products described above for anadromous fish?

Stabilize streambanks, improve riparian vegetation, increase late season flow in Catherine Creek.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Increased flows should become available immediately, improvements to the streambanks and riparian vegetation should become apparent within 2 to 3 years and become more pronounced each following year.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project annual status report will be submitted to the Grande Ronde Model Watershed Program (GRMWP) for 5 years, this report will include photo point monitoring.
Additional photos will be taken to note high flow event impacts and value of treatments.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS PROJECT REVIEW

Project Name: Catherine Creek/Wright-Hempe-Hutchinson Fishway/Diversion Upgrade
BPA Project Number: 9707800
BPA Contract Number: 97AP36073
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Jeff Zakel, Oregon Dept. of Fish and Wildlife

Project Description (Short): The Wright-Hempe-Hutchinson Diversion was modified in 1994 to improve fish passage for threatened chinook salmon, steelhead trout, resident rainbow trout, and bull trout. An old diversion structure was replaced with a full spanning fish ladder. The original NMFS design did not allow for optimum fish passage through the upstream weir. Additionally, too much rock was placed along the south bank, constraining the channel and causing channel scouring below the downstream weir. This resulted in a drop below the weir which exceeded fish passage standards. This project will modify the Wright-Hempe-Hutchinson Diversion structure to meet ODFW fish passage criteria. A removable metal rack will be constructed and placed on the fish ladder. This rack will be used to hold dam boards which will allow irrigators to obtain water, maintain a shallow landing pool above the ladder, and provide a slot(s) for fish passage. Two rock vortex weirs will be built below the ladder, creating two jump pools which will meet ODFW fish passage criteria by raising the pool water levels and reducing the vertical drop between pools.

Location Information:

Site Name (i.e. creek, hatchery): Catherine Creek in City of Union
Subsite Name (i.e. specific location, legal description): T4S R39E Sec 13 SESE
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Union

Site Type Description (See Attachment 1): D, P

Work Type Description (See Attachment 2): C, N

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? The project final report, which will indicate the work dates for this project, has not been submitted to the Grande Ronde Model Watershed Program (GRMWP) yet.

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $ 14,350.00 BPA Cost Share - $11,650.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Constructed a removable metal rack on the fish ladder to meet ODFW fish passage criteria. Constructed 2 rock vortex weirs below ladder to create jump pools.

Are salmon production/supplementation activities planned or currently being implemented in this watershed?

Yes, a captive brood stock program has been conducted in Catherine Creek and an endemic spring chinook salmon supplementation program has been proposed for the same location.

What will be the benefits of the products described above for anadromous fish?

Improved fish passage for threatened chinook salmon, steelhead, resident rainbow, and bull trout.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Fish passage conditions will be improved immediately.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: **No**: X

If Yes, list types and duration of monitoring:

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Grande Ronde River Gooderham/Rynearson Works of Improvement
BPA Project Number: 9707800
BPA Contract Number: 97AP36073
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Union Soil and Water Conservation District

Project Description (Short): This project will install 4 large rock barbs to help stabilize eroding banks and will place 5 large boulder clusters to create resting pools for migrating adult salmon and steelhead. Vegetative clumps will be planted upstream and downstream from the rock barbs to provide long-term stability. A fence will be moved back off river to establish a 30 to 40 foot buffer strip which will be planted with cottonwoods and smaller woody vegetation.

Location Information:

Site Name (i.e. creek, hatchery): Grande Ronde River, between Spruce St. & 2nd, just outside La Grande City Limits
Subsite Name (i.e. specific location, legal description): T2S R38E Sec 31 SESE, 32 SWSW.
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): La Grande

Site Type Description (See Attachment 1): S, F

Work Type Description (See Attachment 2): C, B, V

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? The project final report which will indicate the work dates for this project has not been submitted to the Grande Ronde Model Watershed Program (GRMWP) yet.

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $ 37,350.00 BPA Cost Share - $23,100.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Place 15 boulder clusters in 0.40 miles of stream.
Install 4 new rock barbs and add more rock to existing barbs, plant vegetation upstream and downstream of new barbs.
Install 0.19 miles of riparian exclosure fence, plant riparian buffer strip.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the middle Grande Ronde River but this is a migration corridor to the upper Grande Ronde River where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed.

What will be the benefits of the products described above for anadromous fish?

Stabilize streambanks to reduce sediment delivery to the river. Improve water quality including buffered stream temperatures. Improve in-channel pool habitat.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Bank stability should improve immediately. Riparian vegetation and instream habitat should begin to improve within 2 to 3 years.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project annual status report will be submitted to the Grande Ronde Model Watershed Program (GRMWP) for 5 years, this report will include photo point monitoring.
On-going monitoring of water quality parameters in the Grande Ronde Valley including pH, temperature, dissolved oxygen, etc. will provide overall trends in water quality for the Grande Ronde River.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Bear Creek Channel Improvement
BPA Project Number: 9707700
BPA Contract Number: 97AP36076
Project Implementor and Address: Wallowa Soil and Water Conservation District
201 W North
Enterprise, OR 97828

Project Leader(s): Tom Smith, Natural Resources Conservation Service

Project Description (Short): This project is a continuation of a project funded in 1994/95 with Oregon Watershed Health Funds (Phase I). Phase I proposed to install rock vortex weirs and other structures on all but 2000 ft of a 3.5 mile reach of Bear Creek. Several landowners within that reach chose not to participate at that time. This project (Phase II) will construct additional weirs on stream reaches of landowners who now wish to participate. Their participation will provide a continuous 3.5 mile low flow channel for fish passage and improved aquatic habitat in Bear Creek. Additionally, during construction of Phase I the project designer modified the rock weirs which required more and bigger rock. This project will provide additional funds to cover the increased costs.

Location Information:

Site Name (i.e. creek, hatchery): Bear Creek, lower 3.5 miles.
Subsite Name (i.e. specific location, legal description): T1N R42E Sec 10 SE, 11, 15, 22.
County & State: Wallowa County, Oregon
Hydrounit Number: 17060105
Quad Map(s): Wallowa

Site Type Description (See Attachment 1): S

Work Type Description (See Attachment 2): C

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? The final report which will indicate the work dates for this project has not been submitted to the Grande Ronde Model Watershed Program (GRMWP) yet.

Was the project completed within the original budget? Yes: No: X

If no, what caused cost overruns? An explanation for the cost increases for this project are explained in the project description.

What was the overall cost of the project? $277,233.00 (Phase I & II) BPA Cost Share - $115,733.00. (costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Installed 76 rock vortex weirs in 3.5 miles of stream reach.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in Bear Creek but this stream is a tributary of the Wallowa River which is a migration corridor to the Lostine River where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed.

What will be the benefits of the products described above for anadromous fish?

Improved fish passage and aquatic habitat from creation of a low flow channel, improved bank stability, and by increased vegetative cover.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Improved fish passage should become available immediately, improved bank stability and vegetative cover should be apparent within 5 years and continue to improve each following year.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Photo point monitoring will be conducted for 5 years.
The number of pools and riffles will be surveyed after a five year period.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Bob Morse Livestock Water Development and Stream Crossing Improvement
BPA Project Number: 9707700
BPA Contract Number: 97AP36076
Project Implementor and Address: Wallowa Soil and Water Conservation District
201 W North
Enterprise, OR 97828

Project Leader(s): Tom Smith, Natural Resources Conservation Service

Project Description (Short): An off-stream watering facility will be installed by placing a spring box in the creek and piping to a watering trough. The road crossing will be rocked. A barbwire fence will also be installed to control livestock access into the riparian area. These practices along with the grazing management practices will improve riparian and upland conditions in this area.

Location Information:

Site Name (i.e. creek, hatchery): Unnamed tributary to Grande Ronde River below City of Troy
Subsite Name (i.e. specific location, legal description): T6N R43E Sec 25
County & State: Wallowa County, Oregon
Hydrounit Number: 17060106
Quad Map(s): Troy

Site Type Description (See Attachment 1): A, S, U

Work Type Description (See Attachment 2): U, C, B, O

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 10/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 12,400.00 BPA Cost Share - $7,750.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Rock added to stream crossing.
1 spring/trough livestock water development to benefit approximately 1 mile of stream.
Grazing management plan implemented.
0.5 miles of cross fencing to benefit approximately 1 mile of stream.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the lower Grande Ronde River but this project is located on a tributary of the lower Grande Ronde River. The lower Grande Ronde River is a migration corridor to the upper Grande Ronde River, Catherine Creek, and the Lostine River where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

Improved riparian area vegetation, reduced sediments, and reduced streambank erosion.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Reduction in sediment delivery from rocking the stream crossing should be immediate. The remaining benefits should become apparent within 5 years and should persist and improve each following year.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Grazing utilization will be monitored following the approved NRCS grazing plan. Key areas identified in this plan will be monitored with photo points and measurements made of vegetative production.
Before and after projects photos will be taken.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Eggleson Estate Riparian Improvement Project
BPA Project Number: 9707700
BPA Contract Number: 97AP36076
Project Implementor and Address: Wallowa Soil and Water Conservation District
201 W North
Enterprise, OR 97828

Project Leader(s): Tom Smith, Natural Resources Conservation Service

Project Description (Short): The Eggleson Demonstration Project was started in 1990 with the goal to improve the riparian conditions along Prairie Creek. A plan was developed and implemented to control livestock access and to treat the eroding streambanks. The project included installing an upland watering system, pasture fences, in-stream structures, nine log/vegetative cribs, and bank reshaping/reseeding. The project has been very successful. The cribs and shaped banks were planted with willows found on the property. Woody vegetation establishment has not been satisfactory in five of the log/vegetative cribs. This project will obtain willow cuttings and root wads for planting in the 5 log cribs and along the streambank.

Location Information:

Site Name (i.e. creek, hatchery): Prairie Creek at Eggleson Corner
Subsite Name (i.e. specific location, legal description): T2S R45E Sec 7 SE
County & State: Wallowa County, Oregon
Hydrounit Number: 17060105
Quad Map(s): Joseph NW

Site Type Description (See Attachment 1): S

Work Type Description (See Attachment 2): V

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 10/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 2,000.00 BPA Cost Share - $1,500.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Plant 0.15 miles of streambank with willow bundles.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in Prairie Creek but this stream is a tributary of the Wallowa River which is a migration corridor to the Lostine River where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed.

What will be the benefits of the products described above for anadromous fish?

Improve streambank stability, improve riparian area vegetation and reduce sediments entering Prairie Creek.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Benefits will begin to accrue within 2 to 3 years and will increase in future years.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Photo point monitoring was begun in 1991 following the initial 1990 project.
A project annual status report will be submitted to the Grande Ronde Model Watershed Program (GRMWP) for 5 years, this report will include photo point monitoring from the same sites used for the previous project.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Ed Jones Streambank Protection
BPA Project Number: 9708300
BPA Contract Number: 97AP36419
Project Implementor and Address: Wallowa Soil and Water Conservation District
201 W North
Enterprise, OR 97828

Project Leader(s): Brad Smith, Oregon Dept. of Fish and Wildlife
Tom Smith, Natural Resources Conservation Service

Project Description (Short): This project treated erosion problems on Hurricane Creek by installing 4 rock barbs and vegetative rip-rap and jetties, along with fencing to exclude livestock grazing. An existing side channel was excavated to re-establish winter rearing habitat.

Location Information:

Site Name (i.e. creek, hatchery): Hurricane Creek
Subsite Name (i.e. specific location, legal description): T2S R44E Sec 13 NWSW
County & State: Wallowa County, Oregon
Hydrounit Number: 17060105
Quad Map(s): Enterprise

Site Type Description (See Attachment 1): S, F

Work Type Description (See Attachment 2): C, V, B

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? The project final report which will indicate the work dates for this project has not been submitted to the Grande Ronde Model Watershed Program (GRMWP) yet.

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $ 24,030.00 BPA Cost Share - $20,030.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Installed 4 rock barbs.
Stabilized 0.04 miles of streambank with rock/juniper rip rap and 2 jetties, planted willow sprigs in rock rip rap & jetties and spruce trees along juniper rip rap.
Excavated 1 side channel.
Built 0.5 miles of riparian exclosure fence to protect 0.25 miles of stream, 4.4 acres of riparian habitat.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in Hurricane Creek but this stream is a tributary of the Wallowa River which is a migration corridor to the Lostine River where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed.

What will be the benefits of the products described above for anadromous fish?

Improve streambank vegetation and stability, provide winter rearing habitat, and reduce potential relocation of Hurricane Creek into the Spring Creek drainage.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Bank stability will improve immediately as will the winter rearing habitat. Streamside vegetation will begin to improve within 2 to 3 years and will continue to improve in the following years.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project annual status report will be submitted to the Grande Ronde Model Watershed Program (GRMWP) for 5 years, this report will include photo point monitoring.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS PROJECT REVIEW

Project Name: Miles Ditch Diversion
BPA Project Number: 9708300
BPA Contract Number: 97AP36419
Project Implementor and Address: Wallowa Soil and Water Conservation District
201 W North
Enterprise, OR 97828

Project Leader(s): Tom Smith, Natural Resources Conservation Service

Project Description (Short): A concrete structure will be constructed across the entire width of the river channel. The new structure will consist of a concrete headwall with gates to allow control of the amount of water diverted from the river. The design will eliminate the need to check the water except during extreme low flow conditions. A constant flow will be maintained through the structure for fish passage. A flume to measure the amount of water diverted into the ditch will be installed.

Location Information:

Site Name (i.e. creek, hatchery): Lostine River near Cross Country Canal confluence
Subsite Name (i.e. specific location, legal description): T1S R43E Sec 9 SENE
County & State: Wallowa County, Oregon
Hydrounit Number: 17060105
Quad Map(s): Lostine

Site Type Description (See Attachment 1): D

Work Type Description (See Attachment 2): N

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? The project final report which will indicate the work dates for this project has not been submitted to the Grande Ronde Model Watershed Program (GRMWP) yet.

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $ 147,400.00 BPA Cost Share - $75,000.00

(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Replaced gravel berm and overflow channels with permanent irrigation diversion.

Are salmon production/supplementation activities planned or currently being implemented in this watershed?

Yes, a captive brood stock program has been conducted in Lostine River and an endemic spring chinook salmon supplementation program has been proposed for the same location.

What will be the benefits of the products described above for anadromous fish?

Improve fish passage for migrating adult salmonids and increase instream flows by providing positive control and measurement of diverted water.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Benefits should become available immediately.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project final report with pre- and post-project pictures will be submitted to the Grande Ronde Model Watershed Program (GRMWP).
Quantity of water diverted will be monitored annually during the irrigation season.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Poley Allen Ditch
BPA Project Number: 9708300
BPA Contract Number: 97AP36419
Project Implementor and Address: Wallowa Soil and Water Conservation District
201 W North
Enterprise, OR 97828

Project Leader(s): Tom Smith, Natural Resources Conservation Service

Project Description (Short): This project is located in the Lostine River which is a tributary of the Wallowa River and is spring chinook and summer steelhead habitat. A permanent concrete structure will be constructed across the river channel to replace an annually constructed a cobble dam. The new structure will consist of a concrete headwall with gates to allow control of the amount of water diverted from the river. The design will eliminate the need to check the water except during extreme low flow conditions. A constant flow will be maintained through the structure for fish passage. A flume to measure the amount of water diverted into the ditch will be installed.

Location Information:

Site Name (i.e. creek, hatchery): Lostine River near South Fork Ready Mix Plant
Subsite Name (i.e. specific location, legal description): T1S R43E Sec 15 NESW
County & State: Wallowa County, Oregon
Hydrounit Number: 17060105
Quad Map(s): Lostine

Site Type Description (See Attachment 1): D

Work Type Description (See Attachment 2): N, C

Is project completed? Yes: X No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)? The project final report which will indicate the work dates for this project has not been submitted to the Grande Ronde Model Watershed Program (GRMWP) yet.

Was the project completed within the original budget? Yes: X No:

If no, what caused cost overruns?

What was the overall cost of the project? $ 147,400.00 BPA Cost Share - $75,000.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Relocate diversion and replace cobble pushup dam with a permanent structure.

Are salmon production/supplementation activities planned or currently being implemented in this watershed?

Yes, a captive brood stock program has been conducted in Lostine River and an endemic spring chinook salmon supplementation program has been proposed for the same location.

What will be the benefits of the products described above for anadromous fish?

Improve fish passage for migrating adult salmonids and increase instream flows by providing positive control and measurement of diverted water.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Benefits should become available immediately.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project final report with pre- and post-project pictures will be submitted to the Grande Ronde Model Watershed Program (GRMWP).
Quantity of water diverted will be monitored annually during the irrigation season.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: R-Y Timber Range Management System
BPA Project Number: 9708900
BPA Contract Number: 97AP37346
Project Implementor and Address: Wallowa Soil and Water Conservation District
201 W North
Enterprise, OR 97828

Project Leader(s): Tom Smith, Natural Resources Conservation Service

Project Description (Short): The project will install 17 livestock water developments to provide a source of water away from stream bottoms. Thirteen miles of cross fencing and 11 miles of boundary fencing will divide large upland pastures into smaller more manageable units. These improvements should improve riparian conditions on approximately 7 miles of perennial streams in the Bear Creek drainage and 11,000 acres of upland habitat. Rock dips will be constructed on 1.5 miles of Garden Gulch road to reduce runoff and sediments reaching Bear Creek.

Location Information:

Site Name (i.e. creek, hatchery): Bear Creek & Little Bear Creek
Subsite Name (i.e. specific location, legal description): T1N R42E Sec 25, 26 SW, 34, 35, 36, T1S R42E Sec 1-4, 10, 12, 13, 17, 18, 20, 28, 29, T1S R43E Sec 6, 7
County & State: Wallowa County, Oregon
Hydrounit Number: 17060105
Quad Map(s): Lostine, Fox Point, Wallowa

Site Type Description (See Attachment 1): A, U, E

Work Type Description (See Attachment 2): U, B, E, O

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 09/30/1999

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 443,000.00 BPA Cost Share - $166,500.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Build 24 miles of fence, 13 miles is cross fence, and 11 miles is boundary fence to improve riparian conditions on approximately 7 miles of perennial streams in the Bear Creek drainage and 11,000 acres of upland habitat.
Improve drainage on 1.5 miles of road.
Install 17 livestock water developments.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Bear Creek watershed but this watershed flows into the Wallowa River which is a migration corridor to the Lostine River where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed.

What will be the benefits of the products described above for anadromous fish?

Improve overall riparian and upland conditions by redistributing livestock use away from riparian areas and reducing sediment inputs to streams from roads.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Reduction of sediment input from roads should be evident in 2 to 3 years and become more pronounced each following year. Improved riparian and upland conditions should be apparent in 5 to 10 years and become more pronounced each following year as vegetation becomes established.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A final project report will be submitted to the GRMWP.
Grazing utilization will be monitored following the approved NRCS grazing plan.
Photo point monitoring

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Hindman Road/North Fork Clark Creek
BPA Project Number: 9709000
BPA Contract Number: 97AP62921
Project Implementor and Address: Union County
Public Works Dept., PO Box 1103
La Grande, OR 97850

Project Leader(s): Richard Comstock, Union County

Project Description (Short): This project is located in the Clark Creek watershed which is used by summer steelhead for spawning and rearing. Existing inadequate culverts will be removed and replaced with structures (bridges) designed to provide year-round fish passage and flow capacity to accommodate a 50-year peak flow.

Location Information:

Site Name (i.e. creek, hatchery): Hindman Road at crossings with North Fork Clark Creek
Subsite Name (i.e. specific location, legal description): T1N R40E Sec 27 NWNE, 28 NWNE
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Cricket Flat

Site Type Description (See Attachment 1): E

Work Type Description (See Attachment 2): E

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 12/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: No: X

If no, what caused cost overruns?

A modification was made to the BPA contract to add $10,000 to provide the increased cost of changing from a culvert to a bridge installation.

What was the overall cost of the project? $ 98,435.00 BPA Cost Share - $52,275.00

(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Replace 2 culvert stream crossings with bridges to improve anadromous fish passage.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Clark Creek watershed but this watershed is a tributary of the middle Grande Ronde River which is a migration corridor to the upper Grande Ronde River and Catherine Creek where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

Provide year-around fish passage for anadromous and resident salmonids. Reduce sediment inputs to the Clark Creek system.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Improved fish passage to spawning and rearing habitat should be evident immediately.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project final report with pre- and post-project pictures will be submitted to the Grande Ronde Model Watershed Program (GRMWP).
Annual project status report will be submitted to the GRMWP for 5 years.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Grande Ronde River Hamilton Streambank Stabilization and Enhancement
BPA Project Number: 9709100
BPA Contract Number: 97AP62923
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Union Soil and Water Conservation District

Project Description (Short): This project will treat 400 feet of streambank by installing 5 directional barbs to slow stream velocity and improve bank stabilization and 50 cubic yards of large boulder clusters to provide resting habitat for fish. A vegetative buffer of willows, hardwoods, and cottonwoods will be planted to stabilize the banks and provide increased riparian habitat complexity.

Location Information:

Site Name (i.e. creek, hatchery): Grande Ronde River 1.5 mi. downstream from Elgin
Subsite Name (i.e. specific location, legal description): T1N R39E Sec 11 NW
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Elgin

Site Type Description (See Attachment 1): S

Work Type Description (See Attachment 2): C, V

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 12/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 14,100.00 BPA Cost Share - $10,725.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Place boulder clusters in 0.08 miles of stream.
Install 5 directional rock barbs.
Plant vegetation on 0.08 miles of streambank.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the middle Grande Ronde River but this is a migration corridor to the upper Grande Ronde River and Catherine Creek where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

Stabilize streambanks and reduce sediment delivery to the river. Improve fish habitat by providing resting areas associated with bank stabilization.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Bank stability should improve immediately. Riparian vegetation and instream habitat should begin to improve within 2 to 3 years.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Photo point monitoring for 5 years.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Grande Ronde Alicel Irrigation District Dike Realignment and Refurbishment
BPA Project Number: 9709200
BPA Contract Number: 97AP62925
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Dan Axness, Natural Resources Conservation Service

Project Description (Short): The project will eliminate 7000 feet of existing dike and revegetate disturbed areas with grass and willow plantings. A new dike (1000 feet) will be constructed from material in the old dike. The new dike will be located away from the stream channel and will tie into the existing diking system and natural features. The new dike will be revegetated with sod-forming grasses. Approximately 110 acres of land formerly diked out of the flood plain will now become part of the functional flood plain. A 1.4 mile temporary fence will be built to keep cattle out of the seeded areas.

Location Information:

Site Name (i.e. creek, hatchery): Grande Ronde River near City of Imbler
Subsite Name (i.e. specific location, legal description): T2S R39E Sec 3
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Imbler

Site Type Description (See Attachment 1): W

Work Type Description (See Attachment 2): C, V

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 12/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: No: X

If no, what caused cost overruns?

A modification was made to the BPA contract to add $10,000 to provide for an engineering contingency of 20% of the proposed budget.

What was the overall cost of the project? $ 74,550.00 BPA Cost Share - $62,420.00 (costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Restore 110 acres of natural flood plain.
Revegetate flood plain.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the middle Grande Ronde River but this is a migration corridor to the upper Grande Ronde River and Catherine Creek where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

Allow for a more natural interaction of the river and flood plain by restoring 110 acres of flood plain.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Out-of-bank flow will begin interacting with the flood plain which will be accessible when any future high water events occur.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Photo point monitoring for 5 years.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Troy Streambank Protection
BPA Project Number: 9709300
BPA Contract Number: 97AP62927
Project Implementor and Address: Wallowa Soil and Water Conservation District
201 W North
Enterprise, OR 97828

Project Leader(s): Tom Smith, Natural Resources Conservation Service

Project Description (Short): This project was canceled.

Location Information:

Site Name (i.e. creek, hatchery):
Subsite Name (i.e. specific location, legal description):
County & State:
Hydrounit Number:
Quad Map(s):

Site Type Description (See Attachment 1):

Work Type Description (See Attachment 2):

Is project completed? Yes: No:

If no, when is the project scheduled to be completed?

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: No:

If no, what caused cost overruns?

What was the overall cost of the project?

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Are salmon production/supplementation activities planned or currently being implemented in this watershed?

What will be the benefits of the products described above for anadromous fish?

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Were monitoring and evaluation activities undertaken in association with the project?

Yes: **No**:

If Yes, list types and duration of monitoring:

Are "before and after" photographs of the project site available? **Yes:** **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Phillips Creek Stream Habitat Enhancement
BPA Project Number: 9709500
BPA Contract Number: 97AP64049
Project Implementor and Address: U.S. Forest Service
Walla Walla Ranger District, 1415 W. Rose
Walla Walla, WA 99362

Project Leader(s): Steve Anderson, U.S. Forest Service

Project Description (Short): The project will place large woody debris in Phillips Creek, a summer steelhead stream. The inner riparian area (within 20-30' of stream) will be planted with hardwood species of willow, hawthorn, and cottonwood. This will provide near stream vegetation in the short-term for shade, cover and bank stability. Conifers will be planted in the outer riparian area (from 20-100' of stream) for long-term shade sources and large woody debris recruitment. This project will encompass approximately 4 miles of stream and accompanying riparian area.

Location Information:

Site Name (i.e. creek, hatchery): Phillips Creek
Subsite Name (i.e. specific location, legal description): T1N R38E Sec 2, 3, T2N R38E Sec 28, 33, 34.
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Sanderson Spring

Site Type Description (See Attachment 1): S, F

Work Type Description (See Attachment 2): C, V

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 12/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 14,875.00 BPA Cost Share - $5,365.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Place large woody material in 4 miles of stream.
Plant trees/shrubs within 100 feet of 4 miles of stream.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Phillips Creek watershed but this watershed drains into the middle Grande Ronde River which is a migration corridor to the upper Grande Ronde River and Catherine Creek where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

Improve steelhead habitat by increasing in-channel diversity, stream shade and flows.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Improvements to in-stream habitat diversity will be evident immediately. Increased stream shade and stream flows should become evident within 5 to 10 years and will become more pronounced each following year as vegetation becomes established.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Photo point monitoring.
Stocking surveys to monitor reestablishment of vegetation.
Stream surveys will be performed within 3-5 years after project completion.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Little Dark Canyon Creek Project
BPA Project Number: 9709700
BPA Contract Number: 97AP64055
Project Implementor and Address: U.S. Forest Service
La Grande Ranger District, 3502 Hwy 30
La Grande, OR 97850

Project Leader(s): Pete Etchamendy, U.S. Forest Service

Project Description (Short): A combination of fencing and placement of large woody debris at Antler Springs will reduce livestock access to approximately ½ mile of Little Dark Canyon Creek. A cattleguard will be installed on the ridge east of Dark Canyon Creek to replace a gate which is chronically left open. Improved livestock management will protect approximately 3 miles of Dark Canyon Creek.

Location Information:

Site Name (i.e. creek, hatchery): Dark Canyon Creek subwatershed
Subsite Name (i.e. specific location, legal description): T2S R35E Sec 13 NE, 28 SE, 33 NE
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): McIntyre Creek, Kamela SE

Site Type Description (See Attachment 1): F

Work Type Description (See Attachment 2): B

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 12/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 12,650.00 BPA Cost Share - $5,250.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Place large woody material in riparian zone along 0.5 miles of stream to act as a livestock barrier. Install a cattle guard to protect 3 miles of stream from livestock access.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Little Dark Canyon watershed but this watershed flows into the upper Grande Ronde River which is a migration corridor to the portion of the upper Grande Ronde River watershed where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed.

What will be the benefits of the products described above for anadromous fish?

Accelerate recovery of riparian vegetation, increase streambank stability, and reduced sedimentation by restricting livestock access to riparian areas.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Benefits from this project should become evident within 5 years and become more pronounced each following year.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Forage utilization will be measured to determine if the riparian management objectives are being met. Stream channel conditions, sediment load and water quality determinations will be done periodically when changes to existing conditions are anticipated.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Warm Spring Creek Riparian Improvement Project
BPA Project Number: 9709600
BPA Contract Number: 97AP64056
Project Implementor and Address: U.S. Forest Service
La Grande Ranger District, 3502 Hwy 30
La Grande, OR 97850

Project Leader(s): Pete Etchamendy, U.S. Forest Service

Project Description (Short): Approximately ¾ mile of fence located in upper Warm Spring Creek will be relocated to improve livestock management and riparian habitat. Two gates will be added to the lower Warm Spring Creek exclosure and some realignment will be done along the water gap to facilitate livestock movement. Additional clearing will be done along the fence line at the lower enclosure to make livestock movement easier and reduce livestock pressure on the exclosure fence. The riparian fencing will protect approximately 2 miles of Warm Spring Creek.

Location Information:

Site Name (i.e. creek, hatchery): Warm Spring Creek
Subsite Name (i.e. specific location, legal description): T4S R35E Sec 13, 24, T4S R36E Sec 19 SWSW
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Little Beaver Creek

Site Type Description (See Attachment 1): F

Work Type Description (See Attachment 2): B

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 12/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 6,250.00 BPA Cost Share - $3,500.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Relocate 1 mile of riparian exclosure fence and add two gates to benefit 2 miles of stream.

Are salmon production/supplementation activities planned or currently being implemented in this watershed?

Not directly in Warm Springs Creek but this stream is a tributary of the upper Grande Ronde River just below where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed.

Not directly in this section of the upper Grande Ronde River but this is a migration corridor to the section of the upper Grande Ronde River watershed where a captive brood stock program has been conducted and an endemic spring chinook salmon supplementation program has been proposed.

What will be the benefits of the products described above for anadromous fish?

Provide for more rapid recovery of riparian vegetation and streambank stabilization within the treated stream reach. Lower stream temperatures and improved water quality are expected in the long-term.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Riparian vegetation and streambank stability should improve within 5 years and should show continued improvement in following years. Stream temperature decreases and improved water quality may not show improvement for 10 or more years.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Forage utilization will be measured to determine if the riparian management objectives are being met. Channel conditions, sediment load and water quality determinations will be done periodically when changes to existing conditions are anticipated.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are “before and after” photographs of the project site available? **Yes:** **No**:
Do not know at this time.

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Cottonwood Creek Riparian Enhancement - II
BPA Project Number: 9709800
BPA Contract Number: 97FC63264
Project Implementor and Address: Nez Perce Tribe
PO Box 365
Lapwai, ID 83540

Project Leader(s): Loren Kroneman, Nez Perce Tribe

Project Description (Short): This project is located in the Joseph Creek watershed which supports summer steelhead and resident rainbow trout. The project will stabilize streambanks with rip rap and repair stream channels damaged from flooding. Where possible, roads will be moved away from the creek channel or built up and armored to reduce future road/stream interactions. Two bridge crossings will be repaired, road sections will be rebuilt or resurfaced, cut banks will be armored. Stabilization work will be coordinated closely with ODFW and Tribal fisheries staff to insure maximum habitat benefits.

Location Information:

Site Name (i.e. creek, hatchery): Cottonwood Creek near confluence with Horse Creek
Subsite Name (i.e. specific location, legal description): T5N R46E Sec 2, 3, 10-12, T6N R46E Sec 21, 22, 28, 33
County & State: Wallowa County, Oregon
Hydrounit Number: 17060106
Quad Map(s): Teepee Butte

Site Type Description (See Attachment 1): S, E

Work Type Description (See Attachment 2): C, E

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 12/31/1998

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 61,891.00 BPA Cost Share - $24,600.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Repair stream channels on 1 mile of stream.
Resurface, remove debris and reconstruct 1.1 miles of road.
Repair 2 bridges at stream crossings.
Install .06 miles of rip rap on streambank.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? Not directly in the Cottonwood watershed but this stream flows into Joseph Creek, which is a tributary of the lower Grande Ronde River. The lower Grande Ronde River is a migration corridor to the upper Grande Ronde River, Catherine Creek, and the Lostine River where captive brood stock programs have been conducted and endemic spring chinook salmon supplementation programs have been proposed.

What will be the benefits of the products described above for anadromous fish?

Reduce the amount of sediment deposited into Cottonwood Creek, Joseph Creek and the Grande Ronde River by reducing the direct interaction between the existing roadbed and creek channel.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Reduced sediment delivery from road erosion/runoff will be evident immediately and will become more pronounced each following year.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

Photo point monitoring will be conducted for 5 years and submitted to the GRMWP.
The GRMWP has implemented a basin-wide monitoring strategy to assess baseline water quality conditions and to determine long-term changes and trends in water quality parameters. This monitoring program is not associated with specific projects but is intended to monitor cumulative effects of all projects within individual watersheds.

Are "before and after" photographs of the project site available? **Yes:** X **No**:

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Water Quality Monitoring for the Grande Ronde Basin - II
BPA Project Number: 9710101
BPA Contract Number: 98AP64646
Project Implementor and Address: Union Soil and Water Conservation District
10507 N McAlister
La Grande, OR 97850

Project Leader(s): Union Soil and Water Conservation District

Project Description (Short): The project will coordinate water quality and project effectiveness monitoring in the Grande Ronde basin. The basin coordinator will gather, compile, and analyze all available data collected by entities in the basin and continue to coordinate and improve the current data collection programs. An annual comprehensive report describing water quality will be prepared to aid planning efforts. The existing SWCD monitoring program will be expanded to approximately 40 sites.

Location Information:

Site Name (i.e. creek, hatchery): Grande Ronde Basin
Subsite Name (i.e. specific location, legal description): Basin wide
County & State: Union & Wallowa County, Oregon
Hydrounit Number: 170601
Quad Map(s): N/A

Site Type Description (See Attachment 1): B

Work Type Description (See Attachment 2): A, J

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 06/30/1999

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 164,560.00 BPA Cost Share - $20,500.00
(costs are estimates taken from the project proposal).

What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Walter quality monitoring at 40 sites.
Educate volunteers in water quality sampling procedures.
Prepare annual report assessing water quality condition and trends for the Grande Ronde Basin.

Are salmon production/supplementation activities planned or currently being implemented in this watershed? N/A

What will be the benefits of the products described above for anadromous fish?

Implement a basin-wide monitoring program which will help to establish baseline water quality conditions, assess the effectiveness of on-going habitat restoration projects, and increase awareness of water quality issues.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Baseline water quality condition will take 5 to 10 years to establish. Noticeable water quality improvements will likely not become evident for 10 or more years.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: **No**: X

If Yes, list types and duration of monitoring:

Are "before and after" photographs of the project site available? **Yes:** **No**: X

1997 GRANDE RONDE MODEL WATERSHED PROJECTS
PROJECT REVIEW

Project Name: Catherine Creek State Park Interpretive Signing
BPA Project Number: 9710200
BPA Contract Number: 98AP64907
Project Implementor and Address: Oregon State Parks & Recreation Dept.
PO Box 85
Meacham, OR 97859

Project Leader(s): Larry Gruis, Oregon State Parks & Recreation Dept.

Project Description (Short): The Oregon State Parks and Recreation Department will work with the ODFW to design signs to discourage activities that harass spawning salmon as well as educate park users on the needs of spawning salmon. The project will affect about ½ mile of Catherine Creek within the park.

Location Information:

Site Name (i.e. creek, hatchery): Catherine Creek State Park, RM 26
Subsite Name (i.e. specific location, legal description): T5S R41E Sec 6 SWSW
County & State: Union County, Oregon
Hydrounit Number: 17060104
Quad Map(s): Little Catherine Creek

Site Type Description (See Attachment 1): E

Work Type Description (See Attachment 2): J

Is project completed? Yes: No: X

If no, when is the project scheduled to be completed? 06/30/1999

If yes, how long did the project take from start to finish (not including ongoing monitoring & evaluation activities)?

Was the project completed within the original budget? Yes: X No:
To date there have been no requests for additional funds.

If no, what caused cost overruns?

What was the overall cost of the project? $ 7,000.00 BPA Cost Share - $5,000.00
(costs are estimates taken from the project proposal)

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What was actually produced/built/accomplished by the project (please quantify if possible--e.g., 5 miles of fence constructed, 2 miles of streambank stabilized, 20 acres of land acquired, etc.)?

Construct interpretive signs to discourage activities that harass spawning salmon as well as educate park users on the needs of spawning salmon. The project will affect about ½ mile of Catherine Creek within the park.

Are salmon production/supplementation activities planned or currently being implemented in this watershed?

Yes, a captive brood stock program has been conducted in Catherine Creek and an endemic spring chinook salmon supplementation program has been proposed for the same location.

What will be the benefits of the products described above for anadromous fish?

Reduce disturbance of spawning spring chinook salmon along reaches of Catherine Creek used by spawning salmon within the Catherine Creek State Park.

When will these benefits become available (immediately, next summer, 5 years, 10 years)?

Benefits from this project should take affect the spawning season following completion of the project.

Were monitoring and evaluation activities undertaken in association with the project?

Yes: X **No**:

If Yes, list types and duration of monitoring:

A project annual status report will be submitted to the Grande Ronde Model Watershed Program (GRMWP) for 5 years, this report will include photo point monitoring.

Are "before and after" photographs of the project site available? **Yes:** X **No**: